UNDP

UNITED NATIONS
DEVELOPMENT
PROGRAMME

Distributed on request
DP/PROJECTS/7367

ENGLISH

APPROVAL OF UNDP/UNCDF ASSISTANCE TO A PROJECT OF BANGLADESH

IPF:(1992-96) $163 172 000

(BGD/91/C06)- Integrated Aquaculture

Date of approval by the AC:[1/]	7 October 1992
Expected duration:	Five years
Proposed cooperating agency:	UNDP/OPS
Government executing agency:	Ministry of Fisheries and Livestock
Proposed UNCDF contribution:	$1 860 000
Source of funds:	General Resources

Project background

Endowed with very few natural resources and only limited potential for industrial development, Bangladesh experiences increasing difficulties of employing and feeding its fast growing population. About 30 percent of the nation's labour force is chronically under- or unemployed. Average per capita income is stagnating at a very low $170; and over half the nation's population lives below the official poverty line. Many of them suffer from malnutrition, in particular, lack of animal proteins in their diet.

Fish is the preferred form of dietary protein for the majority of Bangladeshis and constitutes 80 percent of the animal protein consumed nationally. In recent years, national demand for fish has increased while production has declined from overfishing and stock depletion. As a result, fish has become scarcer and prices have been rising rapidly.

Aquaculture production has considerable potential for increasing fish supply. Over half the country's ponds currently lie derelict or under-utilized; yet, environmental conditions for fish farming are favourable and production could be doubled with proper investment and extension.

Intensive fish farming can be extremely lucrative for producers as returns to farmers are currently higher than almost all other competing agricultural activities. However, farmers who wish to move into intensified village fish production face many constraints, including lack of access to credit and extension services and scarcity of affordable fish feed.

[1/] **This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.**

PRISM, a Bangladeshi NGO specializing in the dissemination of appropriate technologies for rural development, has been developing a low-cost fish-feed substitute which is based on the cultivation of duckweed (lemnacea). Duckweed is a high-protein crop that grows wild on stagnant ponds throughout Bangladesh. It has been used in fish polyculture elsewhere in Asia, Israel and South America but has not yet been exploited for productive purposes in Bangladesh. In addition to its value as a low cost protein source, duckweed also has water purification properties and has been used experimentally to treat municipal waste and sewage.

Description of project

The project seeks to address the primary constraints blocking a national increase in fish (aquaculture) production: lack of extension, credit and affordable fish feed. PRISM will assist 1000 landless and small farmers in two of the poorest districts of Bangladesh by providing them the technology and credit financing needed to enter into intensive fish farming based on duckweed technology. Farmer groups will form commercial enterprises to produce duckweed and fish on 200 hectares of pond land. The enterprises will be run on a commercial basis. In return for providing inputs and technical/managerial assistance, PRISM will receive a share of the company's revenue.

It is expected that participating farmers will double their incomes during the course of the project based on a sustained fish and duckweed production of 5 MT/hectare and 200 MT/hectare, respectively. In the long term it is expected that the project will establish a low-cost system of integrated fish-farming which is replicable at the national level.

Inputs

UNCDF will provide PRISM, a Bangladeshi NGO, with the facilities, infrastructure, and capital needed to extend duckweed technology. This will be accomplished primarily through technical and managerial assistance, credit and production inputs, to small commercial enterprises composed of small-scale farmers and the landless.

Financial data

	$
Personnel	170 000
Subcontract	736 000
Equipment	87 000
Miscellaneous	455 000
Contingencies	217 000
OPS Support cost	137 000
UNCDF Support cost	58 000
Total	1 860 000

- - - - -